

## SAFETY PRECAUTIONS



**Avoid exposing the fuel gasses to any potential sources of ignition as the resulting fire and explosion may cause serious injuries and/or death.**



**Switch off the engine when refuelling, as it is both a source of extreme temperatures, and electrical sparks.**



**Switch off any personal electronic devices such as mobile phones or music players.**

## PETROL ENGINED VEHICLES



Do not use leaded fuels, lead substitutes, or fuel additives.



Fuel system cleaning agents should not be used, unless approved by Land Rover.

## OCTANE RATING

The minimum octane rating for fuel used is 95 RON. The vehicle will run on lower ratings, but it may cause pronounced engine knock or pinking. If the pinking is severe it can cause damage to the engine, fuel and emission control systems.

**Note:** *Occasional, light, engine knock experienced while accelerating or climbing hills is acceptable.*

## ETHANOL



This vehicle is not suitable for use with fuels containing more than 10% ethanol.



Do not use E85 fuels (85% ethanol content). Equipment necessary for the use of fuels containing more than 10% ethanol is not fitted to this vehicle. If E85 fuels are used, serious engine and fuel system damage will occur.

Fuels containing up to 10% ethanol (grain alcohol) may be used. Ensure that the fuel has octane ratings no lower than those recommended for unleaded fuel. Most drivers will not notice any operating difference with fuel containing ethanol. If a difference is detected, the use of conventional unleaded fuel should be resumed.

## METHANOL



Wherever possible avoid using fuel containing methanol.

Some fuels contain methanol (methyl or wood alcohol). If you use fuels containing methanol the fuels must also contain co-solvents and corrosion inhibitors for methanol. Also, do not use fuels which contain more than 3% methanol even if they contain co-solvents and corrosion inhibitors. Fuel system damage or vehicle performance problems resulting from the use of such fuels is not the responsibility of Land Rover, and may not be covered under the warranty.

## METHYL TERTIARY BUTYL ETHER (MTBE)

Unleaded fuel containing an oxygenate known as MTBE can be used provided that the ratio of MTBE to conventional fuel does not exceed 15%. MTBE is an ether based compound derived from petroleum, which has been specified by several refiners as the substance to enhance the octane rating of fuel.

## REFORMULATED GASOLINE


These fuels are specially formulated to further reduce vehicle emissions. Land Rover fully supports all efforts to protect and maintain ambient air quality, and encourages the use of reformulated gasoline where available.

## DIESEL ENGINED VEHICLES

Land Rover recommends that only premium brand diesel fuels are used.

**Note:** *Land Rover vehicles are capable of running with up to a 5% blend of bio-diesel in accordance with European Standard EN590.*


## SULPHUR CONTENT

 If your vehicle is fitted with a Diesel Particulate Filter (DPF) the maximum sulphur content must not exceed 0.005%. Using an incorrect fuel will cause serious damage to the DPF.

The sulphur content of diesel used in Land Rover vehicles should not exceed 0.3% (3000 parts per million).

In some countries diesel will contain higher levels of sulphur, which will require reduced service intervals to reduce the effects on engine components. If in doubt contact a local Land Rover Dealer/Authorised Repairer for advice.

## RUNNING OUT OF FUEL

 Avoid running out of fuel. Doing so can cause damage to the vehicle's engine, fuel, and emission control systems.

If the vehicle does run out of fuel, a minimum of 4 litres (0.9 gallons) will be required to restart the engine. The vehicle should be left with the ignition on for 5 minutes after refuelling before attempting to restart the engine. The vehicle will need to be driven 1.6 - 5 km (1 - 3 miles) in order to reset the engine management and monitoring systems.

**Note:** *If the vehicle does run out of fuel, seeking qualified assistance is advisable.*

### Diesel engines


Vehicles with diesel engines are equipped with a system to prevent the fuel tank from emptying completely. When the fuel reaches a minimum level, the system will activate a reduced power mode (i.e. the engine will not run properly). This will be followed by the engine stopping in approximately 1.6 km (1 mile).

This feature prevents the fuel system from running dry, which could cause damage to the vehicle. If the gauge indicates low fuel or the warning indicator illuminates, the fuel tank should be refuelled as soon as possible at the next filling station, with at least 4 litres (0.9 gallons) of fuel.

If the system protection function has activated, the vehicle must firstly be refuelled, then restarted using the following procedure:

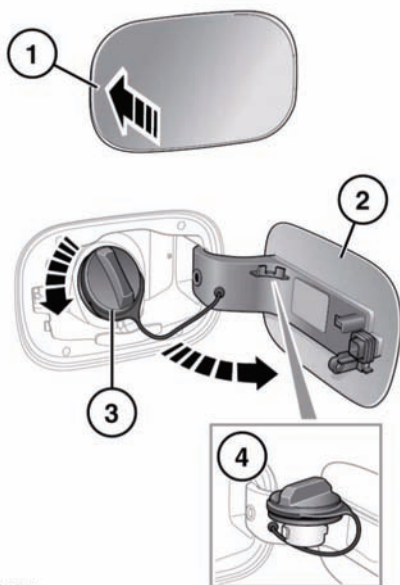
1. With the brake pedal pressed, press and hold the engine START/STOP button and crank the engine for five seconds.
2. Release the START/STOP button.
3. With the brake pedal pressed, press and release the START/STOP button to crank the engine. The engine should start within approximately five seconds.

**Note:** *If the engine does not start, pause for ten seconds with the ignition in convenience mode, before repeating the procedure from the beginning.*

 Do not crank the engine for longer than 30 seconds continuously.

## FUEL FILLER FLAP

- ⚠ Take note of all warnings and instructions given on the label affixed to the inside of the filler flap.



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The fuel filler flap is located on the right-hand side of the vehicle, at the rear.

1. Ensure that the vehicle is fully unlocked, and press the left side of the flap to open.
2. Open the flap fully.
3. Twist the cap anticlockwise to undo.
4. Use the retaining clip to keep the filler cap out of the way whilst fuelling.


## FUEL FILLER

- ⚠ When refuelling ensure that all windows, doors, and sunroof are fully closed, particularly if young children or animals are in the vehicle.
- ⚠ Do not attempt to fill the tank to its maximum capacity. If the vehicle is to be parked on a slope, in direct sunlight, or high ambient temperature, expansion of the fuel could cause spillage.
- ⚠ Do not operate the auxiliary heater when refuelling the vehicle. Doing so may cause fuel vapours to combust causing a fire/explosion.
- ⚠ Check the fuel pump information carefully, to ensure that you are putting the correct fuel into the vehicle.
- ⚠ If the vehicle is filled with incorrect fuel it is essential that you seek qualified assistance before you start the engine.

Filling station pumps are equipped with automatic cut-off sensing to avoid fuel spillage. Fill the tank until the filler nozzle automatically cuts-off the supply. Do not attempt to fill the tank beyond this point.

**Note:** Filling station pumps used for diesel commercial vehicles deliver fuel at a higher rate than normal. The higher fill rate can cause premature cut-off and may cause fuel spillage. Therefore, it is recommended that only standard light vehicle pumps are used.

## WATER IN FUEL

 If the warning **WATER IN FUEL SEE HANDBOOK** is displayed in the message centre, an excessive amount of water has collected in the fuel filter bowl. Seek assistance from a Land Rover Dealer/Authorised Repairer to have the filter drained as soon as possible.


## FUEL TANK CAPACITY

Avoid the risk of running out of fuel and never intentionally drive the vehicle when the fuel gauge indicates that the tank is empty. When refuelling your vehicle after the fuel gauge reads empty, you may not be able to add the fuel quantity shown below, as there will be a small reserve remaining in the tank.

<b>Total tank capacity (usable):</b>	
Petrol engines	88 litres (19.3 gallons)
Diesel engines	84 litres (18.4 gallons)

## FUEL SPECIFICATION

<b>Petrol</b>	<b>Diesel</b>
91-98 RON	EN 590

 Diesel vehicles in Algeria, Egypt, Libya, Morocco, India, Pakistan and Tunisia must only use premium diesel fuel.

## DIESEL MISFUELLING PROTECTION DEVICE



When the misfuelling device is activated, it may cause fuel to be discharged from the filler neck.

**Note:** It is the driver's responsibility to fill the vehicle with the correct fuel. The diesel misfuel protection device only reduces the risk of filling the vehicle with the incorrect fuel.

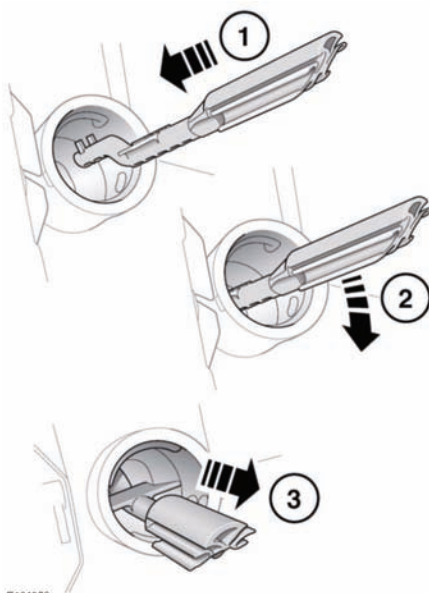
Diesel engine vehicles in some markets are equipped with a misfuelling protection device, incorporated into the fuel filler neck.

If the narrow filler nozzle fitted to pumps delivering unleaded petrol is fully inserted into the filler neck, the misfuel protection device will activate.

**Note:** The filler spout on some fuel cans and older fuel pumps may trigger the misfuelling device.

When activated, the yellow misfuel protector will be visible inside the filler neck. It will prevent fuel flow into the tank. Before fuelling can continue with the correct fuel, the device will need to be reset.

The reset tool is located in the luggage compartment.



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Reset the misfuel protection device as follows:

1. Insert the reset tool (with the teeth uppermost) as far as it will go into the filler neck.
2. Locate the teeth by pushing down the top of the reset tool.
3. With the top of the tool pressed down and the teeth engaged, slowly pull the tool out of the filler neck to reset the device.



Do not twist the device, once the teeth have engaged.

**Note:** The yellow part of the protection device should no longer be visible in the filler neck.

Return the reset tool to the luggage compartment.

## FUEL CONSUMPTION

The fuel consumption figures shown below have been calculated using a standard testing procedure (the new EC test procedure from Directive 99/100/EC), and produced in accordance with The Passenger Car Fuel Consumption (Amendment) Order 1996.

Under normal use, a vehicle's actual fuel consumption figures may differ from those achieved through the test procedure, depending on driving technique, road and traffic conditions, environmental factors, vehicle load and condition.

Variant	Urban	Extra-urban	Combined	CO <sub>2</sub> emissions
	l/100 km (mpg)	l/100 km (mpg)	l/100 km (mpg)	g/km
V6 Diesel (6 speed transmission)	11.2 (25.2)	8.1 (34.9)	9.2 (30.7)	243
V6 Diesel (8 speed transmission, 155 kW)	9.7 (29.1)	7.8 (36.2)	8.5 (33.2)	224
V6 Diesel (8 speed transmission, 188 kW)	9.8 (28.8)	8.1 (34.9)	8.8 (32.1)	230
V8 Petrol (Naturally Aspirated)	19.8 (14.3)	10.5 (26.8)	13.9 (20.3)	327
V8 Petrol (Supercharged)	21.8 (13.0)	10.7 (26.3)	14.9 (19.0)	348

## URBAN CYCLE

The urban test cycle is carried out from a cold start and consists of a series of accelerations, decelerations and periods of steady speed driving and engine idling. The maximum speed attained during the test is 50 km/h (30 mph) with an average speed of 19 km/h (12 mph).

## EXTRA-URBAN CYCLE

The extra-urban test cycle is carried out immediately after the urban test. Approximately half of the test comprises steady speed driving, while the remainder consists of a series of accelerations, decelerations and engine idling. The maximum test speed is 120 km/h (75 mph) and the average speed 63 km/h (39 mph). The test is carried out over a distance of 7 km (4.3 miles).

## COMBINED

The combined figure is an average of the urban and extra-urban test cycle results, which has been weighted to take account of the different distances covered during the two tests.

For additional information on fuel consumption figures and exhaust emissions, visit the Vehicle Certification Agency (VCA) website at <http://www.vcacarfueldata.org.uk/>.

